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# ME3-H<sub>2</sub> Gas Sensors Manual

## 1 Feature

ME series H<sub>2</sub> sensors have low consumption , small size, high sensitivity, wide range of linearity , and better anti-jamming capacity, good reproducibility , stability and reliability ect advantage . It is electrochemical sensor widely suits for industry and environmental protection field ect

## 2 Application

Type	Detecting Object	Use	Remark
ME3- H <sub>2</sub>	H <sub>2</sub>	Detecting H <sub>S</sub> in industry and environmental protection field	

## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Measurement Range	0-1000ppm	Remark
Sensitivity(μA/ppm)	0.020±0.005	
Reproducibility	Output signal ±2%	
Response time(t <sub>90</sub> ) s	≤90	
Signal attenuation	≤2%	/month
Zero drift (ppm)	-10~10	Clean air
Temperature range (°C)	-20~+50	
Temperature drift (ppm)	≤10	20~50°C
Humidity range	≤95%RH	
Pressure range (kPa)	90~110	
Storage temperature (°C)	0~20	Recommendation
Storage period (month)	6	
Anticipated using life (month)	>24	
Max detecting concentration (ppm)	2000ppm	

# ME4-H<sub>2</sub> Gas Sensors Manual

## 1 Feature

ME series H<sub>2</sub> sensors have low consumption , small size, high sensitivity, wide range of linearity , and better anti-jamming capacity, good reproducibility, stability and reliability ect advantage. It is electrochemical sensor widely suits for industry and environmental protection field ect .



## 2 Application

Type	Detecting GAS	Application	Remark
ME4-H <sub>2</sub>	H <sub>2</sub>	Detecting H <sub>2</sub> in industry and environmental protection field	

## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Type	ME4-H <sub>2</sub>		
Measurement Range	0-500ppm	0-1000ppm	Remark
Sensitivity(μA/ppm)	0.05±0.01	0.03±0.01	
Reproducibility	Output signal±2%	Output signal±2%	
Response time(t <sub>90</sub> ) s	≤30	≤30	
Signal attenuation	≤2%	≤2%	/month
Zero drift (ppm)	-10~10	-10~10	Clean air
Temperature range (°C)	-20~+50	-20~+50	
Temperature drift (ppm)	≤10	≤10	20~50°C
Humidity range	≤95%RH	≤95%RH	
Pressure range (kPa)	90~110	90~110	
Storage temperature (°C)	0~20	0~20	Recommendati
Storage period (month)	6	6	
Anticipated using life (month)	>24	>24	
Max detecting concentration	1000	2000	

### 3.1.2 Products external dimension

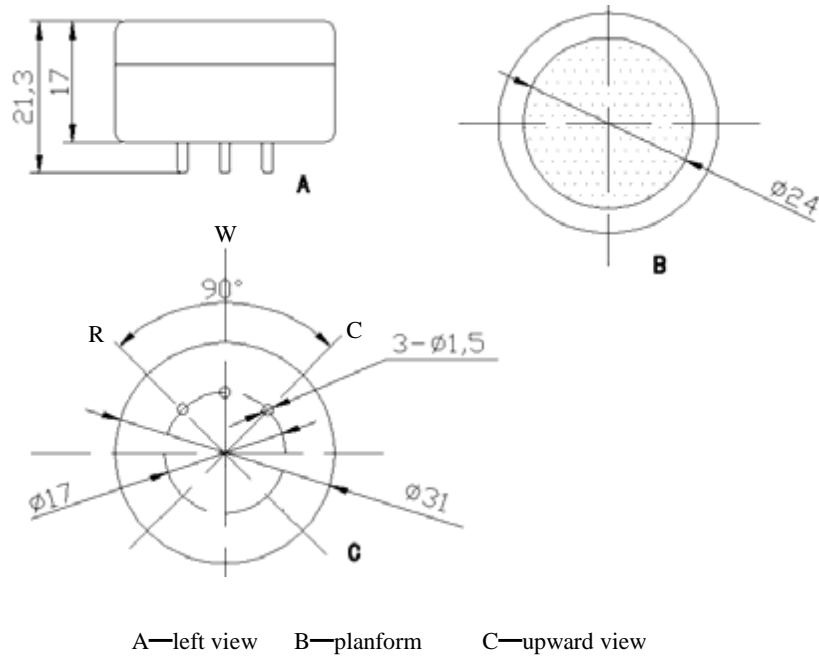


Chart 1. products external dimension

### 3.2 Gas sensitivity

#### 3.2.1 ME4-H<sub>2</sub> type electrochemical sensor concentration response characteristic curve

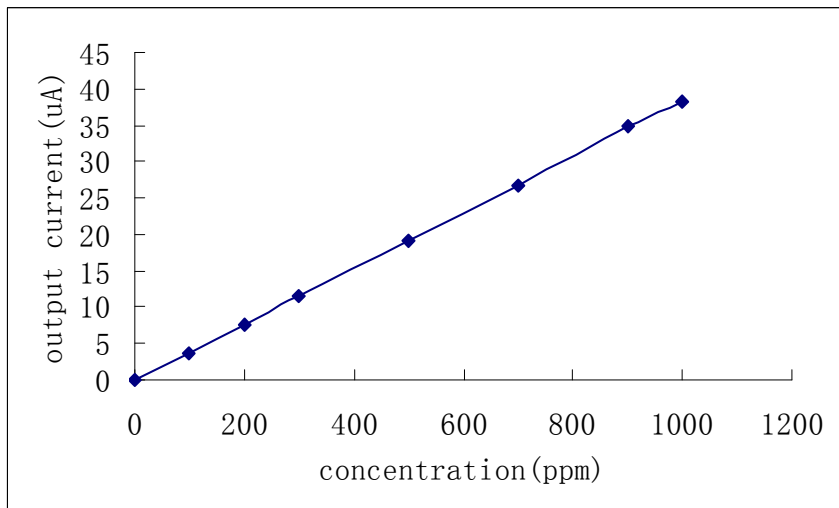


Chart 2 .sensitivity curve

#### 3.2.2 ME4-H<sub>2</sub> type electrochemical sensor response , resume time and output current relation curve

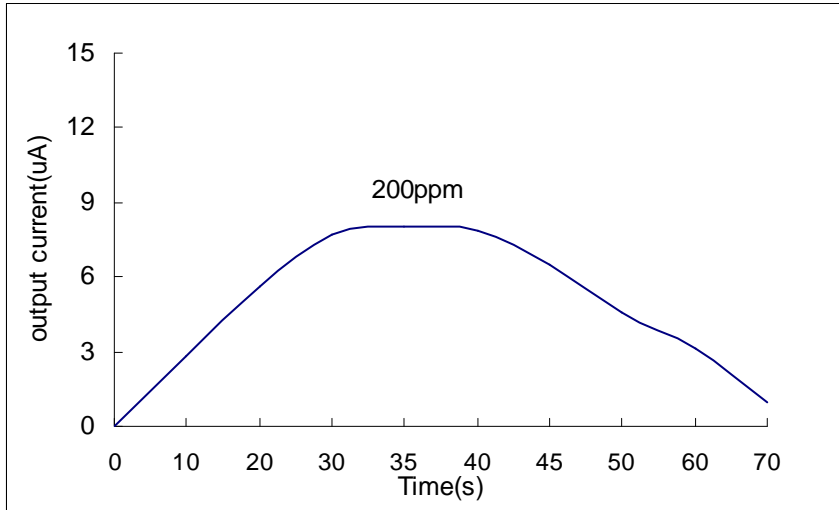


Chart 3.response and resume curve

### 3.2.3 Temperature characteristic

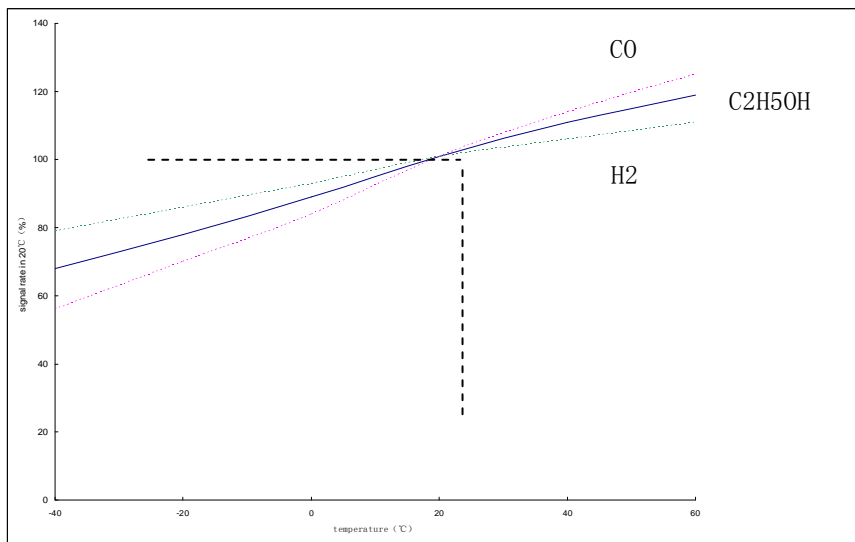
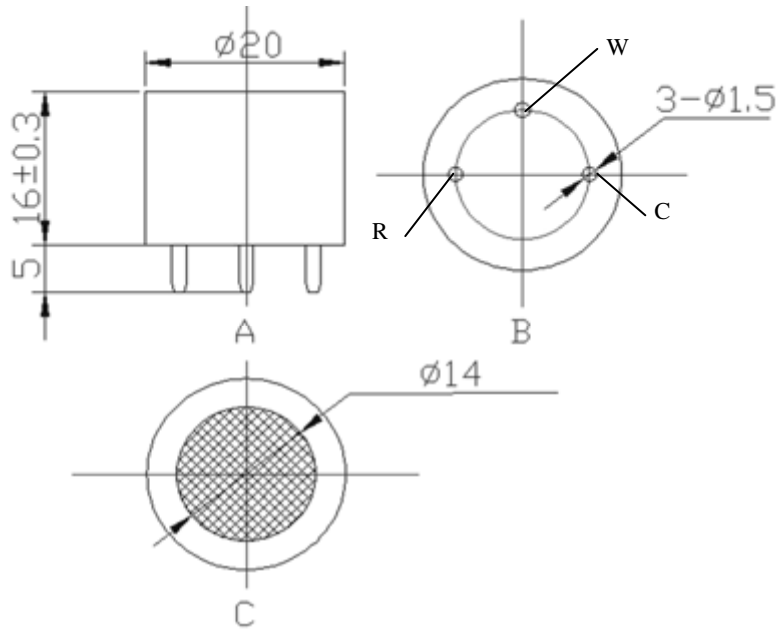


Chart 4. temperature curve

### 3.1.2 Products external dimension



A—left view    B—palmform    C—upward view

Chart 1. products external demension

### 3.2 Gas sensitivity

#### 3.2.1 ME3- H<sub>2</sub> type electrochemical sensor concentration response characteristic curve

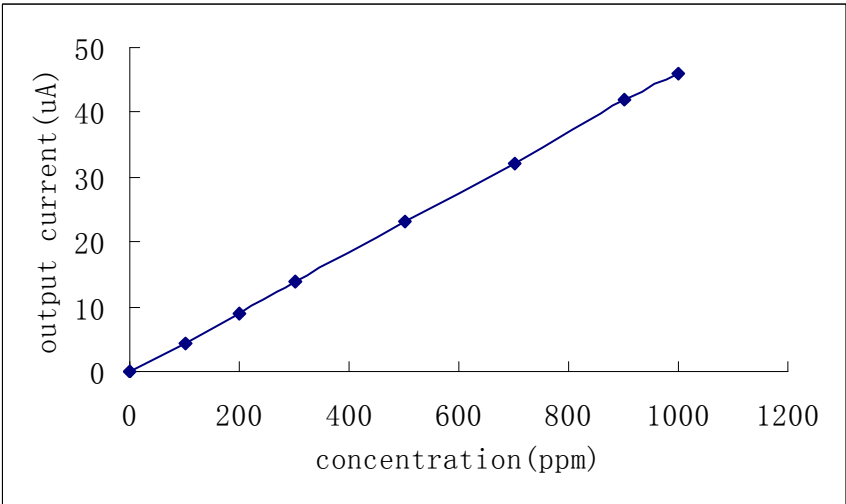


Chart 2 .sensitivity curve

**3.2.2 ME3-H<sub>2</sub> type electrochemical sensor response , resume time and output current relation curve**

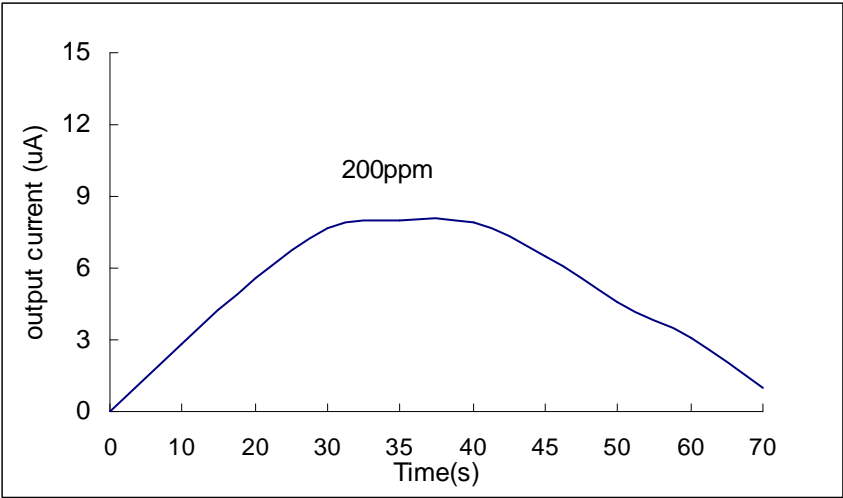


Chart 3 response and resume curve

**3.2.3 Temperature characteristic**

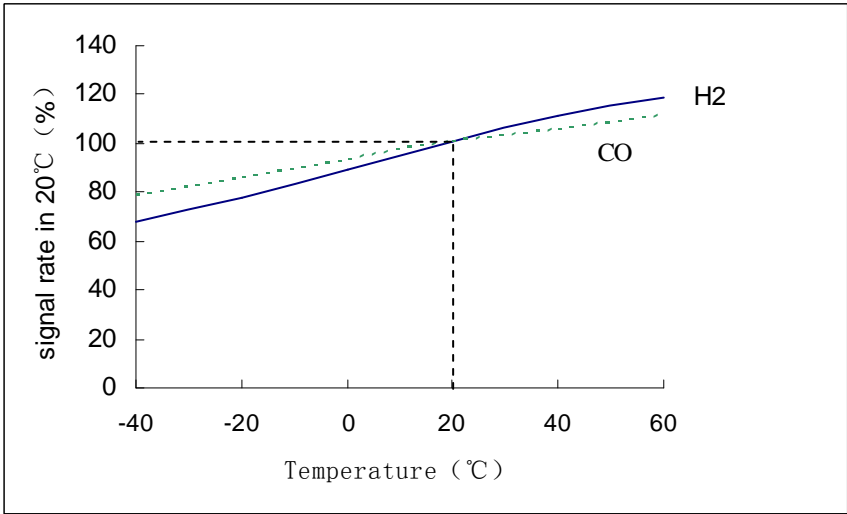


Chart 4. Temperature curve

**3.2.4 Anti-interference ability**

ME3-H<sub>2</sub> responses to other gases besides the target gas, upon that listing the follow table for your information, which indicates response features of the sensor to the several normal interferential gases. The data in the table is the representative response of the gas in certain concentration

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Gas	Concentration	ME3-H2
H2S	15ppm	4ppm
HCL	5ppm	0ppm
SO2	5ppm	0ppm
CH2	100ppm	85ppm
NO2	5ppm	0.5ppm

# ME4-H<sub>2</sub> Gas Sensors Manual

## 1 Feature

ME series H<sub>2</sub> sensors have low consumption , small size, high sensitivity, wide range of linearity , and better anti-jamming capacity, good reproducibility, stability and reliability ect advantage. It is electrochemical sensor widely suits for industry and environmental protection field ect .



## 2 Application

Type	Detecting GAS	Application	Remark
ME4-H <sub>2</sub>	H <sub>2</sub>	Detecting H <sub>2</sub> in industry and environmental protection field	

## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Type	ME4-H <sub>2</sub>		
Measurement Range	0-500ppm	0-1000ppm	Remark
Sensitivity(μA/ppm)	0.05±0.01	0.03±0.01	
Reproducibility	Output signal±2%	Output signal±2%	
Response time(t <sub>90</sub> ) s	≤30	≤30	
Signal attenuation	≤2%	≤2%	/month
Zero drift (ppm)	-10~10	-10~10	Clean air
Temperature range (°C)	-20~+50	-20~+50	
Temperature drift (ppm)	≤10	≤10	20~50°C
Humidity range	≤95%RH	≤95%RH	
Pressure range (kPa)	90~110	90~110	
Storage temperature (°C)	0~20	0~20	Recommendati
Storage period (month)	6	6	
Anticipated using life (month)	>24	>24	
Max detecting concentration	1000	2000	



### 3.1.2 Products external dimension

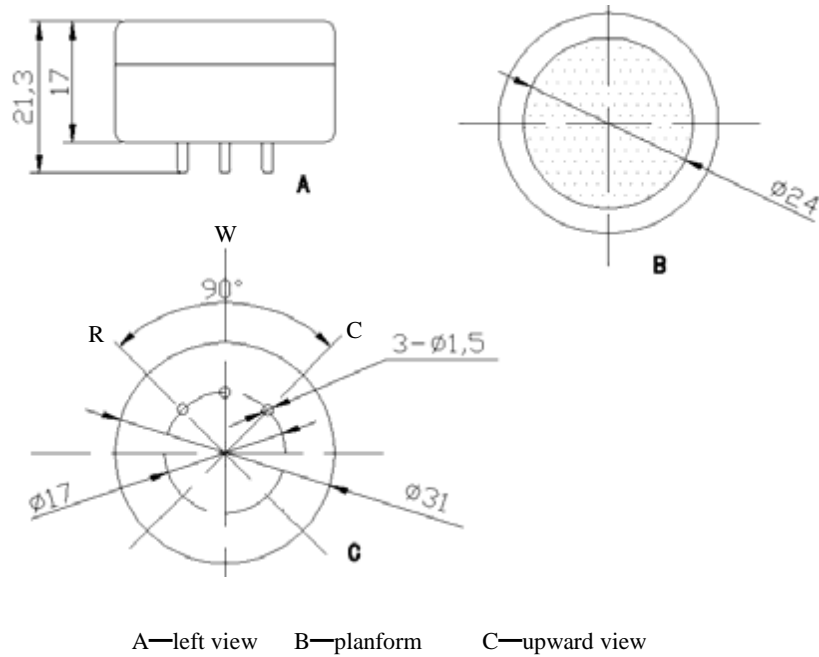


Chart 1. products external dimension

### 3.2 Gas sensitivity

#### 3.2.1 ME4-H<sub>2</sub> type electrochemical sensor concentration response characteristic curve

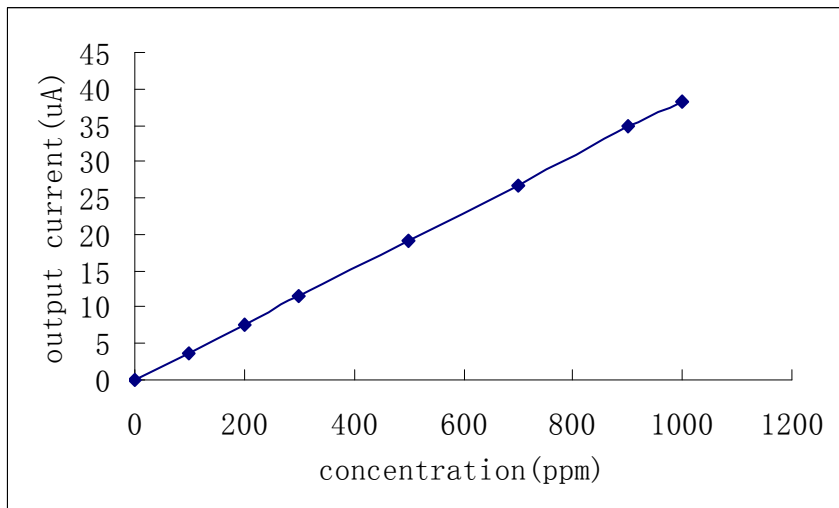


Chart 2 .sensitivity curve

#### 3.2.2 ME4-H<sub>2</sub> type electrochemical sensor response 、 resume time and output current relation curve

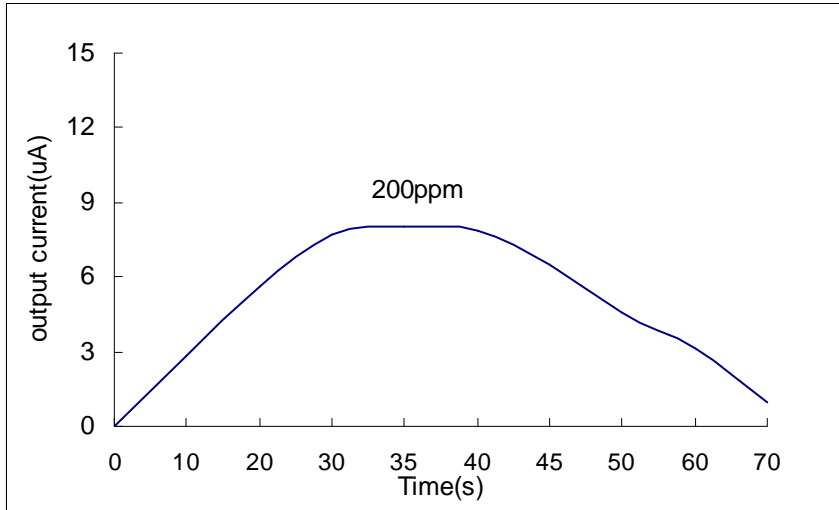


Chart 3.response and resume curve

### 3.2.3 Temperature characteristic

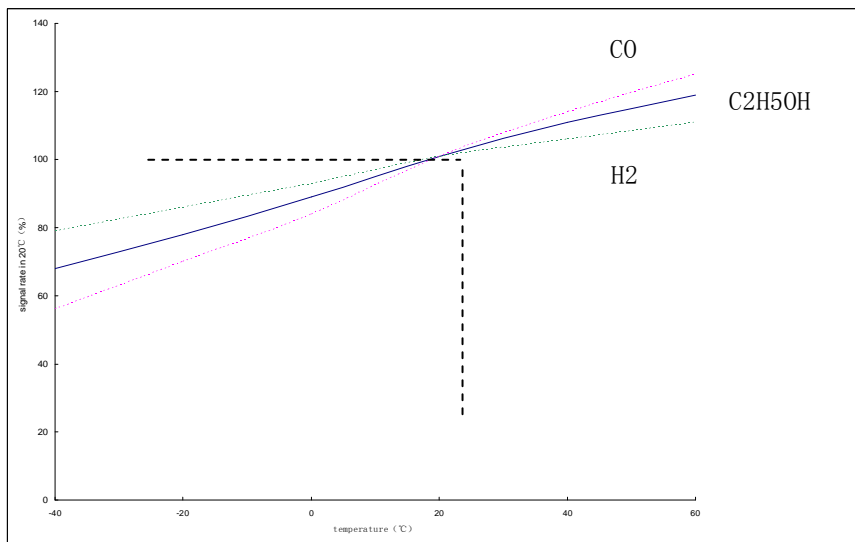
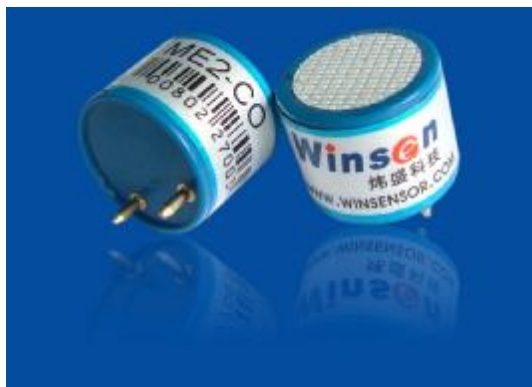


Chart 4. temperature curve

# ME2-CO Carbon Monoxide Sensor Manual

## Overview

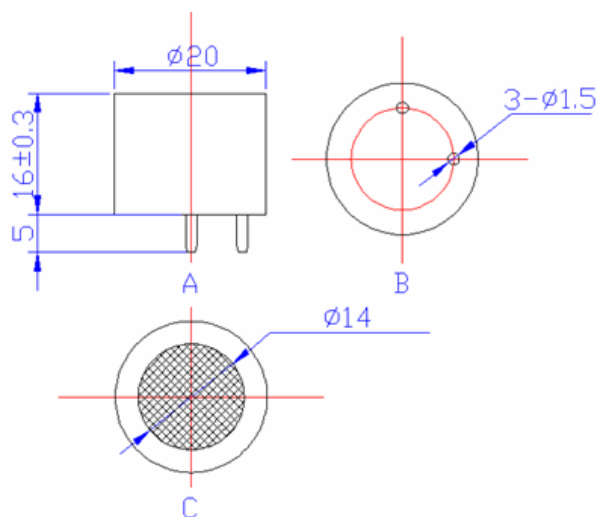
ME2-CO electrochemical sensor detects the CO gas concentration by measuring current based on the electrochemical principle, which utilizes the electrochemical oxidation process of target gas on the working electrode inside the electrolytic cell, the current produced in electrochemical reaction of the target gas are in direct proportion with its concentration while following Faraday law, then concentration of CO could be get by measuring value of current.



## Features

- \* Low consumption
- \* High precision
- \* High sensitivity
- \* Extensive linear range
- \* Strong anti-interference ability
- \* Excellent repeatability and stability

## Configuration



A—Left view B—upward view C—vertical view

W electrode — working electrode for oxidation reaction

C electrode — counter electrode for deoxidization reaction

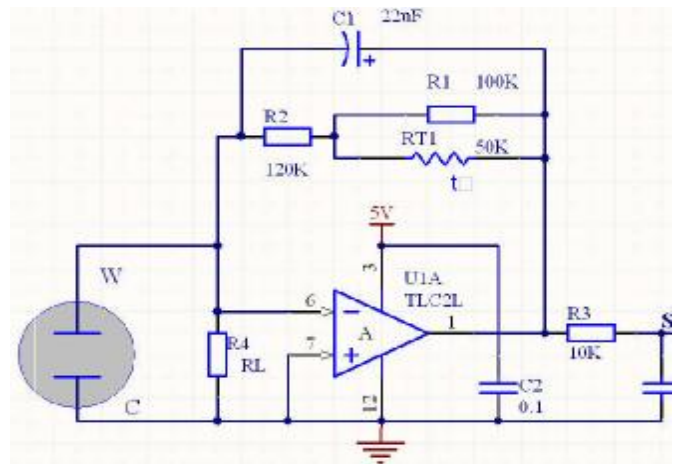
## Application

Widely use for the industrial application, especially the domestic use for CO concentration detection.

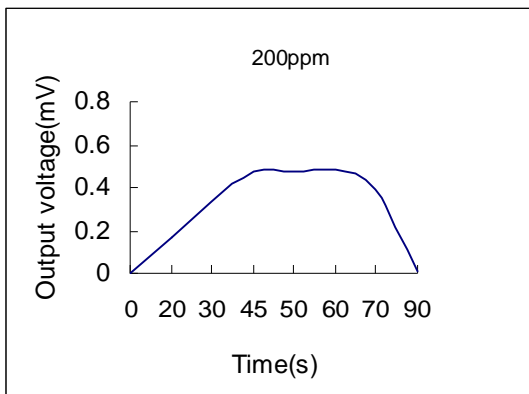
## Technical specification

Items	Technical parameter
Detection Range	0—1000ppm
Max detecting bound	2000ppm
Detecting life	5 years
Sensitivity	0.015±0.005μA/ppm
Resolution	0.5ppm
Temperature range	-20°C—50°C
Pressure range	Normal atmosphere±10%
Response time (T90)	<50S
Humidity range	15%—90%RH
Zero shift (-20°C~+40°C)	≤10ppm
Stability (/ Month)	<10%
Load resistance (commend)	200Ω
Reproducibility	<10% output value
Output linearity	Linearity

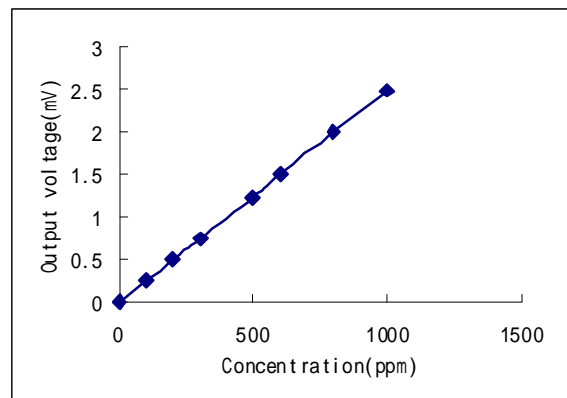
## Basic Testing Circuit



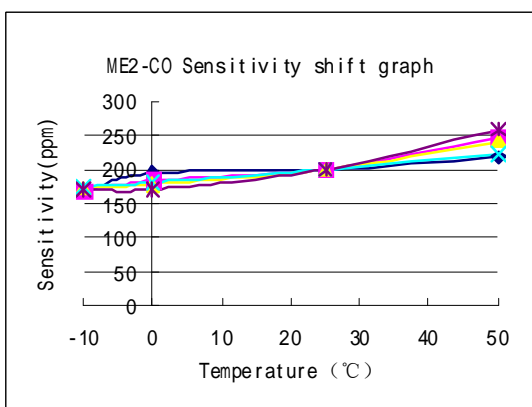
### Features of sensitivity, response and output signal



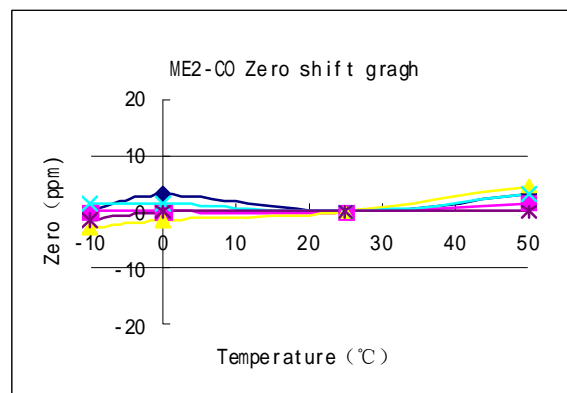
### Data graph of concentration linearity features



### Sensitivity shift based on high-low temperature



### Zero shift based on high-low temperature



## **Anti-interference ability**

ME2-CO is able to response to other gases besides the target gas, upon that listing the follow table for your information, which indicates response features of the sensor to the several normal interferential gases.

The data in the table is the representative response of the gas in certain concentration.

Gas	Concentration	ME2-CO
H <sub>2</sub> S	100ppm	0ppm
SO <sub>2</sub>	20ppm	0ppm
H <sub>2</sub>	200ppm	40ppm
Ethene	100ppm	80ppm
NO	35ppm	6ppm
NO <sub>2</sub>	5ppm	0ppm
Ethanol	1000ppm	0ppm

### **Note**

- n To avoid the sensor touching the organic solvent (silica gel and other cementing compound), dope, medicament, oil and high concentration gas.
- n All the electrochemical series gas sensor could be neither entirely packaged with resinous material, nor submerged in the pure oxygen environment, otherwise its performance will be damaged.
- n All the electrochemical series gas sensor can not have application in the corrosive gas environment, which will damage the sensor.
- n Please measure the gas sensitivity in the clean air.
- n To avoid the obverse target gas blowing intensively when measuring the gas sensitivity, otherwise the gas sensitivity will be extremely high.
- n Break off or curve the pin is forbidden.
- n The breathing vent should not be blocked or polluted, otherwise the sensitivity would be lower.
- n Prevent the sensor from excessive impaction or vibration.
- n Do not use the sensor if its shell is damaged.
- n It would be comparatively slow for the sensor resumes to the initial mode after using in the high concentration gas for long time.
- n Do not take apart the sensor optionally, or its electrolyte would be leaked to damage the sensor.
- n Working and reference electrode should be in short-circuit condition when sensor for stock.
- n Please aging the sensor at least 24 hours prior to use it, and the soldering installation is forbidden.

# ME3-CO Gas Sensor Manual

## 1 Feature

ME series CO sensors have low consumption , mini size , high sensitivity , wide range of linearity , and better anti-jamming capacity , good reproducibility , stability and reliability ect advantage. It is widely used for mine , industry and environmental protection field ect .



## 2 Application

Type	Detecting Object	Use	Remark
ME3-CO	CO	Detecting CO in industry, mine and environmental protection	

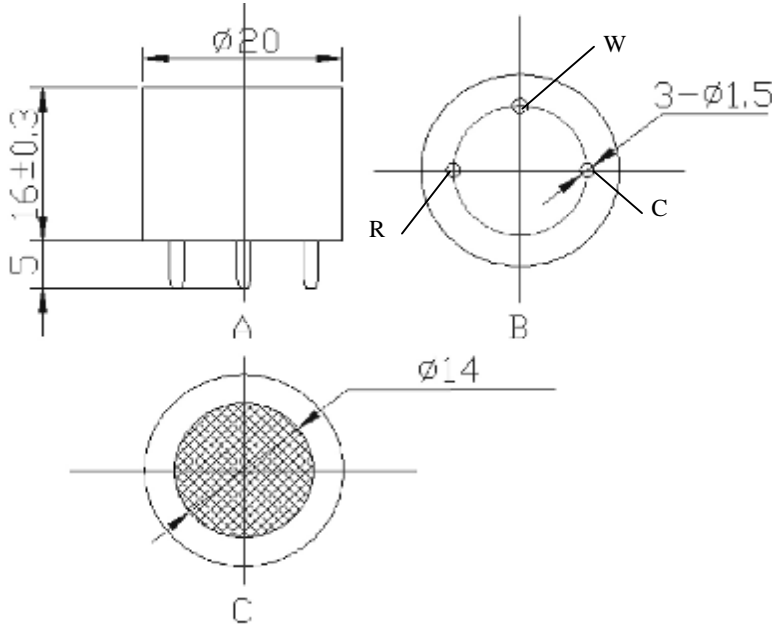
## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Type	ME3-CO		
Measurement Range	0-500ppm	0-1000ppm	Remark
Sensitivity( $\mu$ A/ppm)	0.08 $\pm$ 0.02	0.06 $\pm$ 0.02	
Reproducibility	Output signal $\pm$ 2%	Output signal $\pm$ 2%	
Response time( $t_{90}$ ) s	$\leq$ 30	$\leq$ 30	
Signal attenuation	$\leq$ 2%	$\leq$ 2%	/month
Zero Drift (ppm)	-2~10	-2~10	Clean air
Temperature range (°C)	-20~+50	-20~+50	
Temperature drift (ppm)	$\leq$ 10	$\leq$ 10	20~50°C
Humidity range	$\leq$ 95%RH	$\leq$ 95%RH	
Pressure range (kPa)	90~110	90~110	
Storage temperature (°C)	0~20	0~20	Recommendati
Storage period (month)	6	6	
Anticipated using life (month)	>24	>24	
Max detecting concentration	1000	2000	

### 3.1.2 Products external dimension



A—left view B—planform C—upward view

Chart 1. products external dimension

### 3.2 Sensitivity

#### 3.2.1 ME3-CO type electrochemical sensors' concentration response characteristic curve

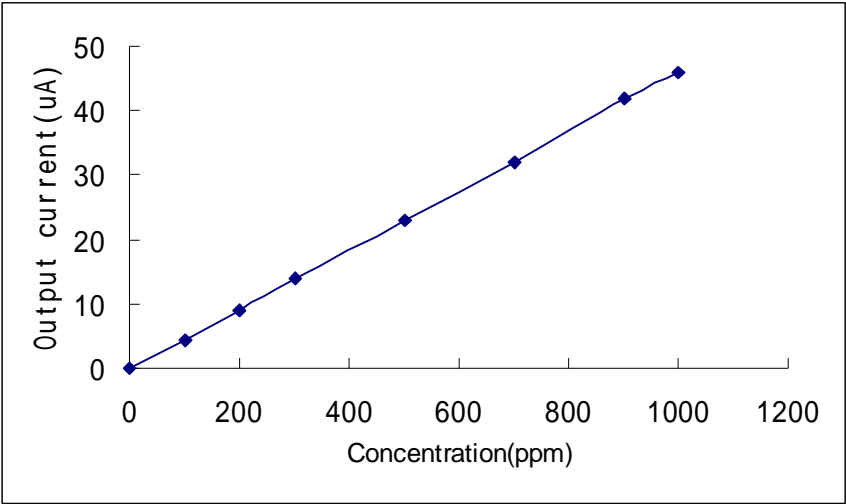


Chart 2 sensitivity curve

### 3.2.2 ME3-CO type electrochemical sensors' response , resume time and output current relation curve

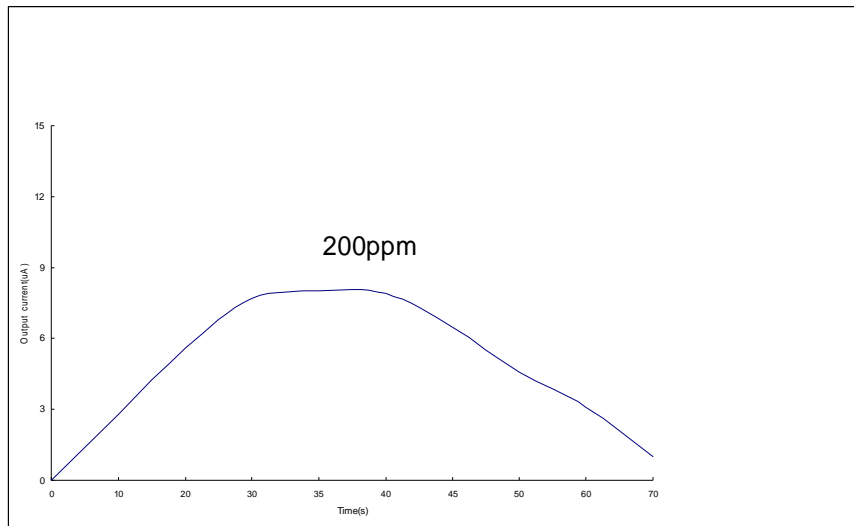


Chart 3.response and resume curve

### 3.2.3 Temperature characteristic

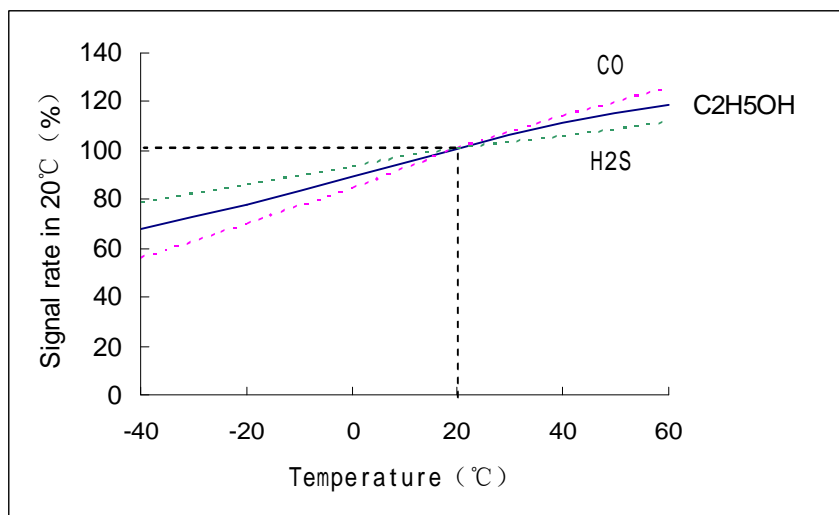


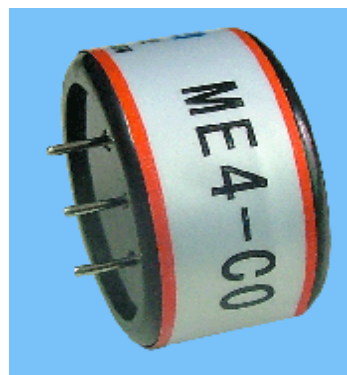
Chart 4.Temperature curve



# ME4-CO Gas Sensors Manual

## 1 Feature

ME series CO sensors have low consumption, small size, high sensitivity, wide range of linearity, and better anti-jamming capacity, good reproducibility, stability and reliability ect advantage. It is electrochemical sensor widely suits for mine, industry and environmental protection field ect .



## 2 Application

Type	Detecting Object	Use	Remark
ME4-CO	CO	Detecting CO in industry, mine and environmental protection field	

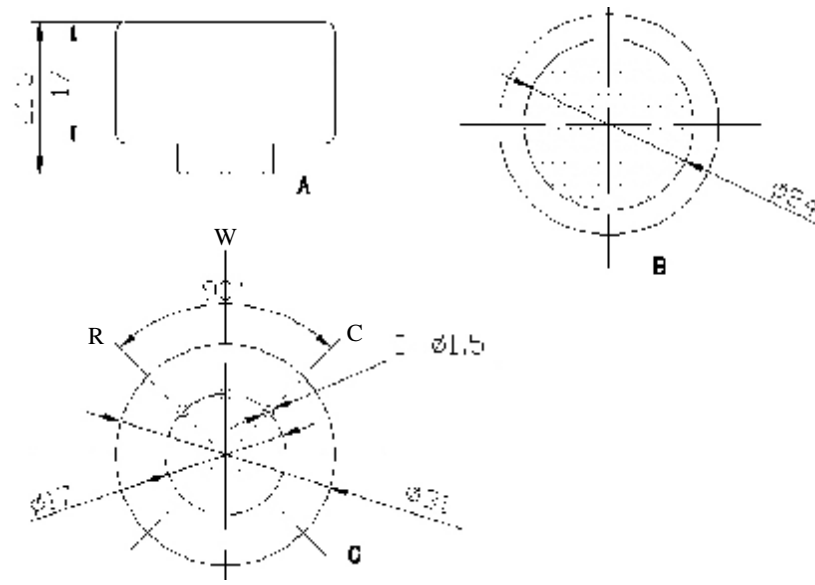
## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Measurement Range	0-500ppm	0-1000ppm	remark
Sensitivity( $\mu A/ppm$ )	$0.10 \pm 0.02$	$0.06 \pm 0.02$	
Reproducibility	Output signal $\pm 2\%$	Output signal $\pm 2\%$	
Response time( $t_{90}$ ) s	$\leq 30$	$\leq 30$	
Signal attenuation	$\leq 2\%$	$\leq 2\%$	/month
Zero drift (ppm)	-5~10	-5~10	Clean air
Temperature range (°C)	-20~+50	-20~+50	
Temperature drift (ppm)	$\leq 10$	$\leq 10$	20~50°C
Humidity range	$\leq 95\%RH$	$\leq 95\%RH$	
Pressure range (kPa)	90~110	90~110	
Storage temperature (°C)	0~20	0~20	recommendatio
Storage period (month)	6	6	
Anticipated using life (month)	>24	>24	
Max detecting concentration	1000	2000	

### 3.1.2 Products external dimension



A—left view B—planform C—upward view

Chart 1. products external dimension

### 3.2 Gas sensitivity

#### 3.2.1 CO Electrochemical sensor concentration response characteristic curve

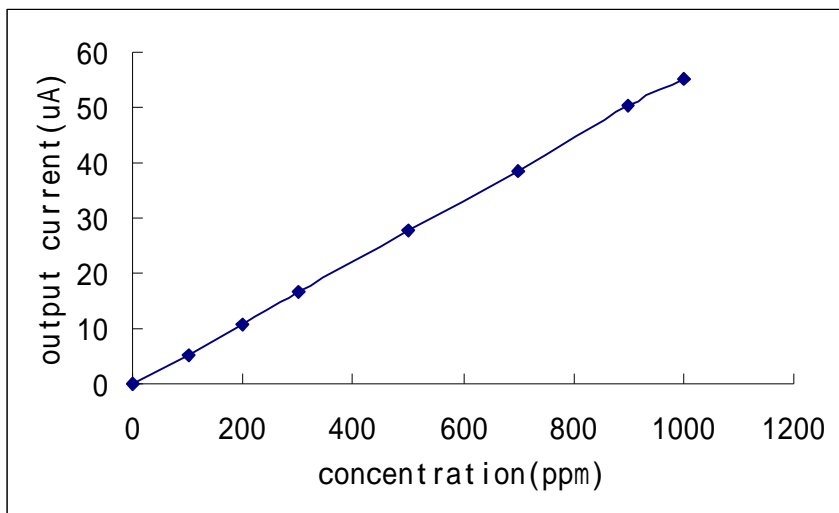


Chart 2 .sensitivity curve

### 3.2.2 ME4-CO type electrochemistry sensors' response, resume time and output current relation curve

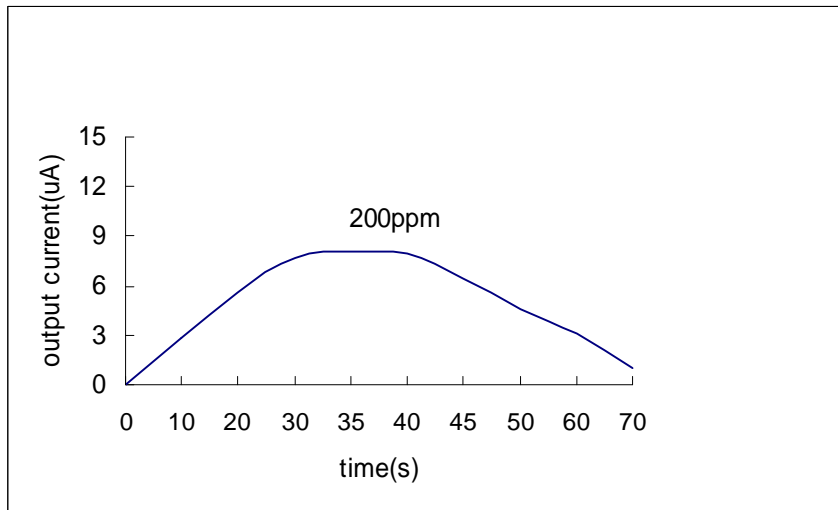


Chart 3.response and resume curve

### 3.2.3 Temperature characteristic

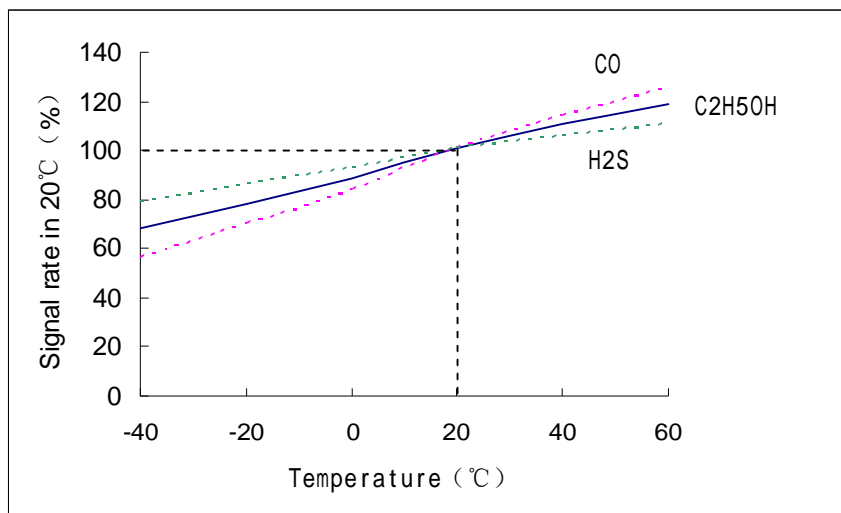


Chart 4. Temperature curve

# ME3-Cl<sub>2</sub> Gas Sensors Manual

## 1 Feature

ME series Cl<sub>2</sub> sensors have low consumption , small size , high sensitivity , wide range of linearity, and better anti-jamming capacity , good reproducibility, stability and reliability ect advantage. It is electrochemical sensor widely used for industry and environmental protection field, ect .



## 2 Application

Type	Detecting Object	Use	Remark
ME3-Cl <sub>2</sub>	Cl <sub>2</sub>	Detecting Cl <sub>2</sub> for industry and environmental protection field	

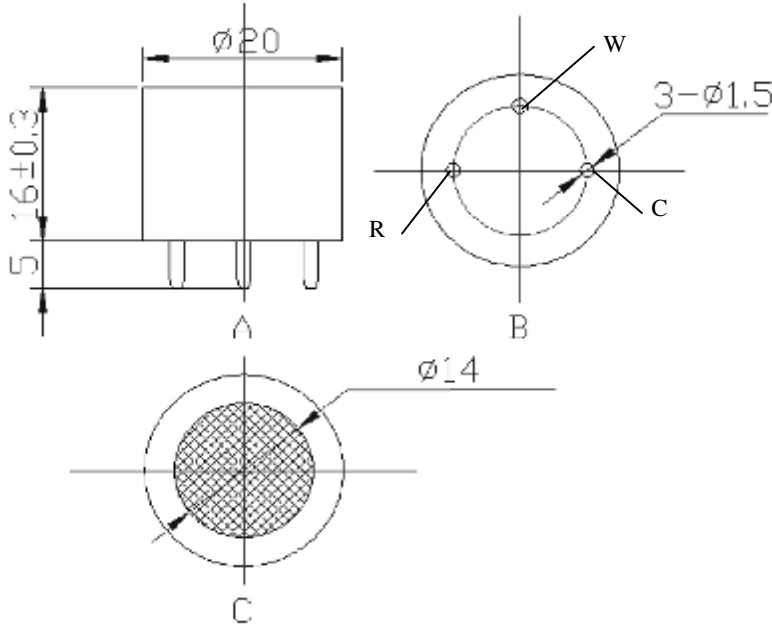
## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Type	ME3-Cl <sub>2</sub>	
Measurement Range	0-20ppm	Remark
Sensitivity(μA/ppm)	1.0±0.20	
Reproducibility	Output signal ±2%	
Response time(t <sub>90</sub> ) s	≤30	
Signal attenuation	≤2%	/month
Zero drift (ppm)	-0.1~0.1	Clean air
Temperature range (°C)	-20~+50	
Temperature drift (ppm)	≤0.2	20~50°C
Humidity range	≤95%RH	
Pressure range (kPa)	90~110	
Storage temperature (°C)	0~20	Recommendati
Storage period (month)	6	
Anticipated using life (month)	>12	
Max detecting concentration	200	

### 3.1.2 Products external dimension



A—left view    B—Planform    C—upward view

Chart 1 products external dimension

### 3.2 Gas sensitivity

#### 3.2.1 ME3-Cl<sub>2</sub> electrochemical sensor concentration response characteristic curve

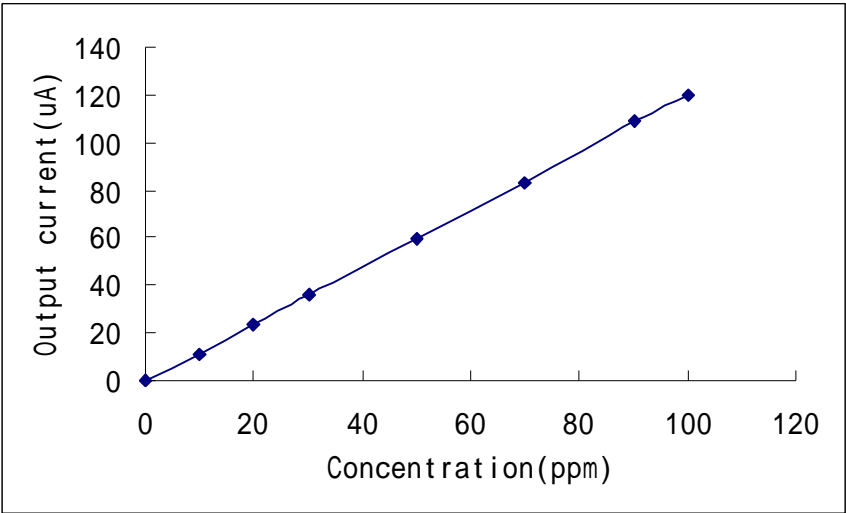


Chart 2 .sensitivity curve

**3.2.2 ME3-Cl<sub>2</sub> type electrochemical sensors' response , resume time and output voltage relation curve**

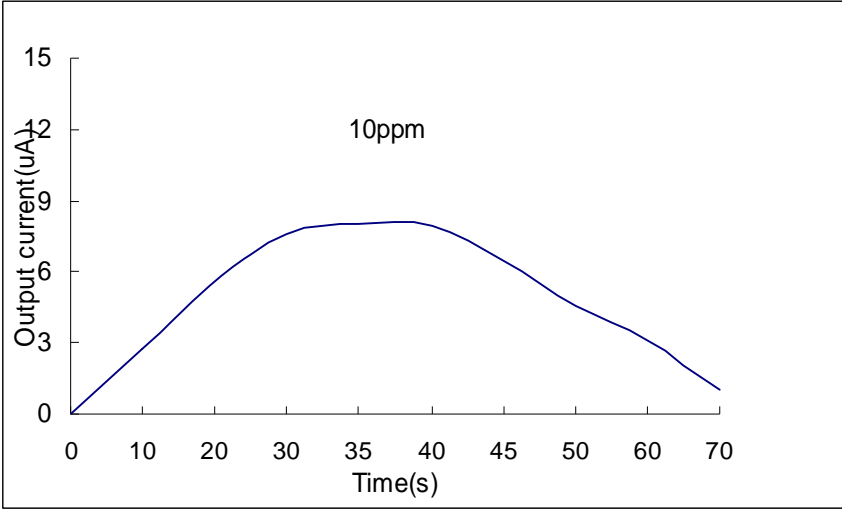


Chart 3.response and resume curve

**3.2.3 Temperature characteristic**

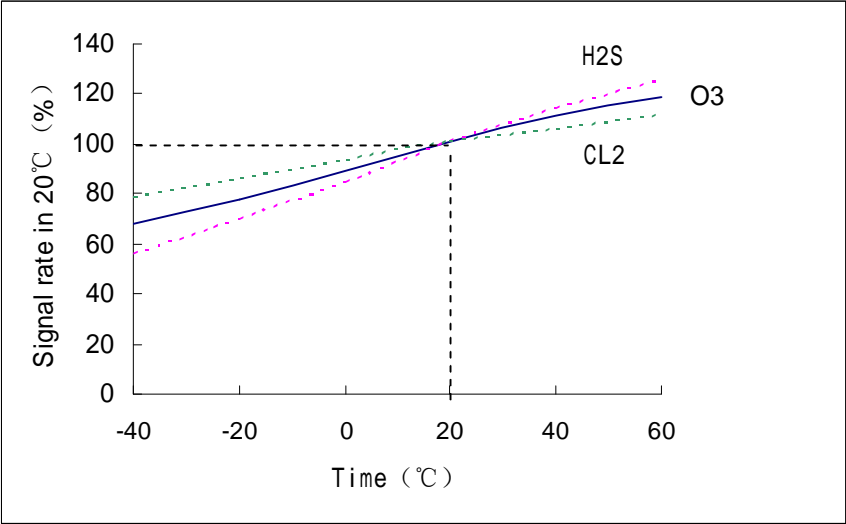


Chart 4.Temperature curve

# ME3-SO<sub>2</sub> Gas Sensor Manual

## 1 Feature

ME series SO<sub>2</sub> sensors have low consumption, high precision and sensitivity, wide range of linearity, and better anti-jamming capacity, good reproducibility, stability etc advantages. It is electrochemical sensor widely suits for industry and environment protection field etc.



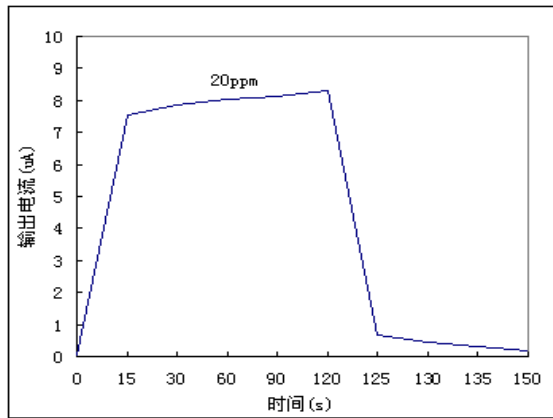
## 2 Applications

Type	Detecting Object	Use	Remark
ME3-SO <sub>2</sub>	SO <sub>2</sub>	Detecting SO <sub>2</sub> in industry and environmental protection field	

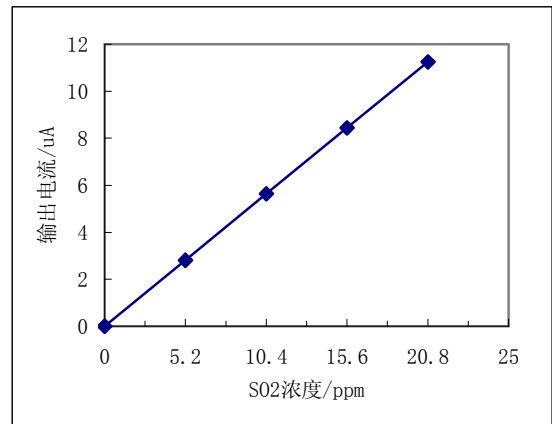
## 3 Specifications

Sensor	ME3-SO <sub>2</sub>
Type	Electrochemical
Stand Cover	Plastic (ME3)
Detected Range	0—20ppm
Filter	H <sub>2</sub> S filter out
Max detecting concentration	150ppm
Life	2 years
Sensitivity(μA/ppm)	0.50±0.10uA/ppm
Resolution	0.1ppm
Temperature Range	- 20℃~+50℃
Pressure Range	Standard atmosphere ±10%
Response Time(T90)	≤30S
Humidity range	15%—90% RH non-condensing
Zero Drift ( - 20℃~+40℃ )	≤0.2ppm
Signal attenuation ( / month )	<2%
RL(recommend)	10 Ω
Repeatability	<2%
Output Linearity	Linearity

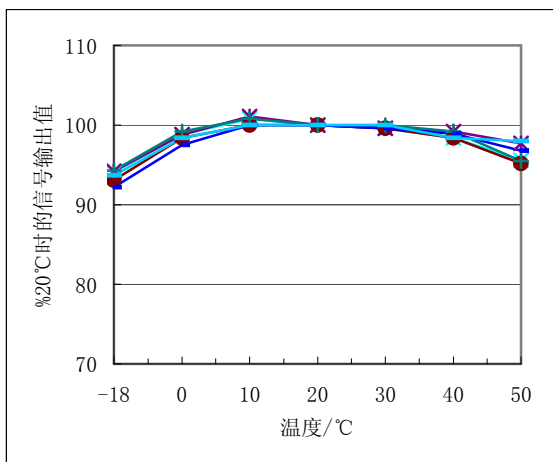
### Features of sensitivity, response and output signal



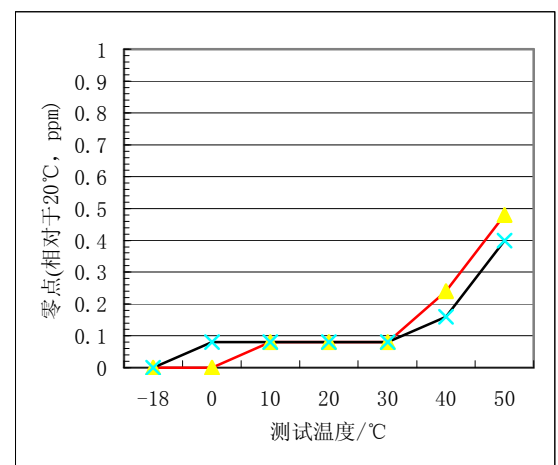
### Data graph of concentration linearity features



### Sensitivity shift based on high-low temperature



### Zero shift based on high-low temperature



## 4. Anti-interference ability

ME3-SO<sub>2</sub> is able to response to other gases besides the target gas, upon that listing the follow table for your reference, which indicates response features of the sensor to the several normal interferential gases. The data in the table is the representative response of the gas in certain concentration.



Gas	Concentration	ME3-SO2
H2S	100ppm	0
CO	200ppm	<2ppm
NO	35ppm	0
NO2	5ppm	about -5ppm
PH3	20ppm	0
NH3	10ppm	0
CL2	10ppm	<-2ppm
HCl	5ppm	0
CH4	400ppm	0

# ME3-NO<sub>2</sub> Gas Sensor Manual

## 1 Feature

ME series NO<sub>2</sub> sensors have low consumption, mini size, high sensitivity, wide range of linearity, and better anti-jamming capacity, good reproducibility, stability and reliability ect advantage. It is electrochemical sensor widely suits for industry and especially civil field ect



## 2 Application

Type	Detecting Object	Use	Remark
ME3-NO <sub>2</sub>	NO <sub>2</sub>	Detecting NO <sub>2</sub> in industry and environment	

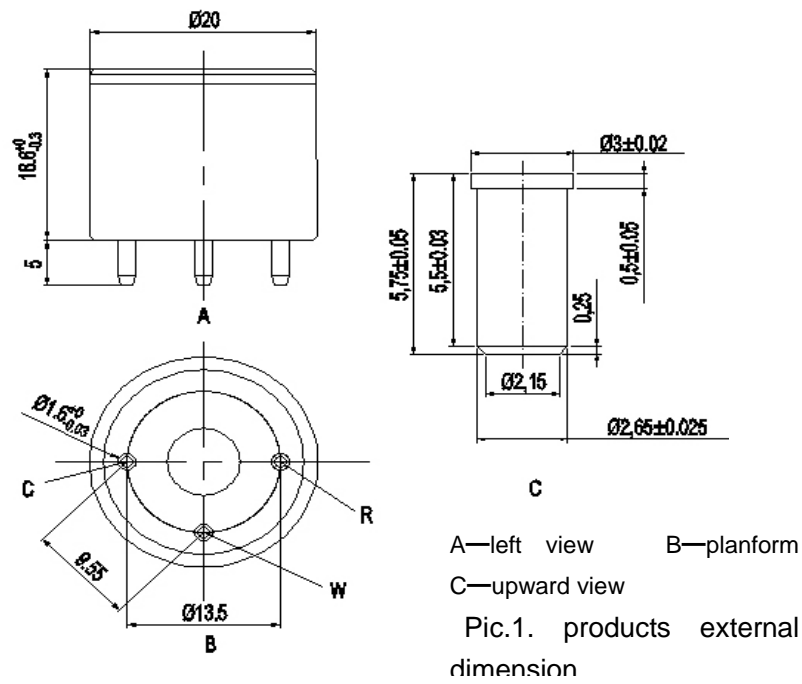
## 3 Feature

### 3.1 Basic Character

#### 3.1.1 Basic Feature

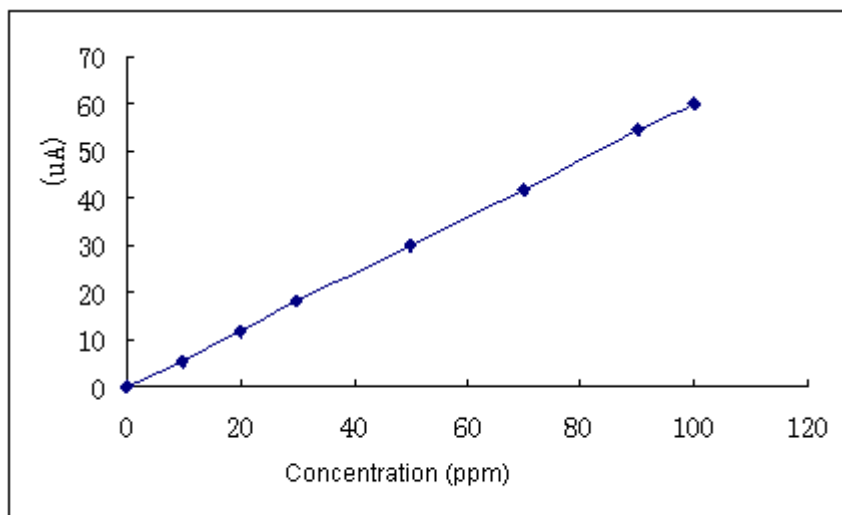
Model No.	ME3-NO <sub>2</sub>	
Detection Range	0-20ppm	Remark
Sensitivity (μA/ppm)	0.60±0.15	
Reproducibility	Output Signal	
Response Time(t <sub>90</sub> ) s	≤25	
Signal attenuation	≤2%	/month
Zero drift (ppm)	-0.1~0.1	Clean Air
Temperature range (°C)	-20~+50	
Temperature drift (ppm)	≤0.2	20~50°C
Humidity range	≤95%RH	
Pressure range (kPa)	90~110	
Storage temperature (°C)	0~20	Recommendation
Storage period (month)	6	
anticipated using life (month)	>12	
Max detecting concentration (ppm)	200	

### 3.1.2 Products external dimension



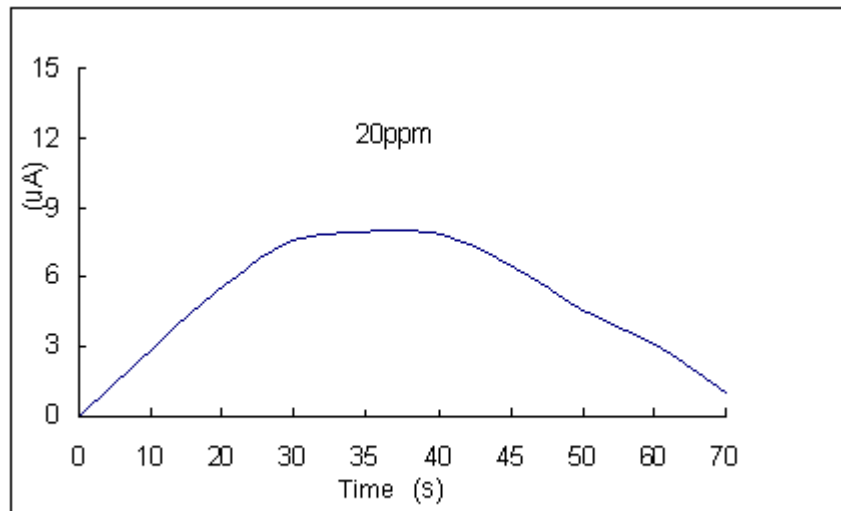
### 3.2 Gas sensitivity

#### 3.2.1 ME3-NO<sub>2</sub> sensor concentration response characteristic curve



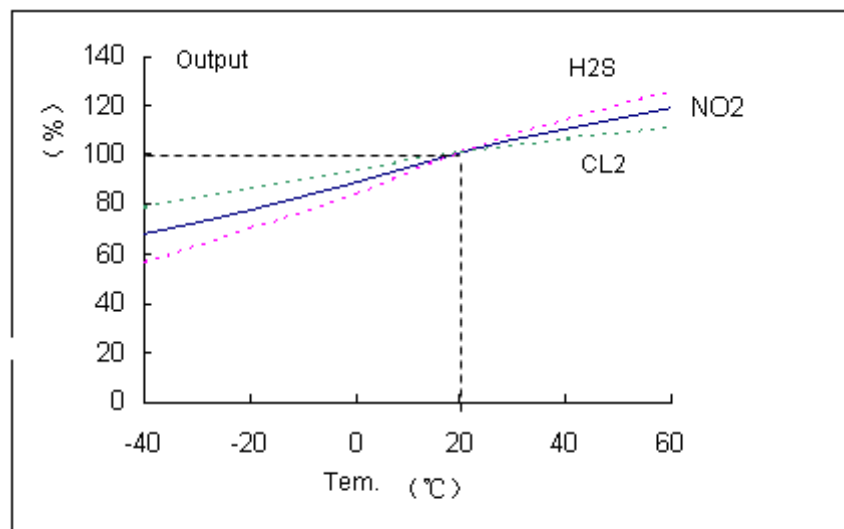
Pic. 2 Sensitivity Curve

### 3.2.2 ME3-NO<sub>2</sub> type electrochemical sensors' response , resume time and output current relation curve



Pic. 3 Response and Resume Curve

### 3.2.3 Temperature Character



Pic 4 . Temperature Curve

### 3.2.4 Anti-interference ability

ME3-NO<sub>2</sub> responses to other gases besides the target gas, upon that listing the follow table for your information, which indicates response features of the sensor to the several normal interferential gases. The data in the table is the representative response of the gas in certain concentration.

Gas	Concentration	ME3-NO2
H2S	15ppm	<-3ppm
CO	300ppm	0ppm
NO	35ppm	0ppm
CL2	5ppm	≈5ppm
SO2	5ppm	0ppm
HCN	10ppm	0ppm
HCL	5ppm	0ppm

# ME3-H<sub>2</sub>S Gas Sensors Manual

## 1 Feature

ME series H<sub>2</sub>S sensors have low consumption, small size, high sensitivity, wide range of linearity, and better anti-jamming capacity, good reproducibility, stability and reliability ect advantage. It is electrochemical sensor widely suits for mine, industry and environmental protection field ect.



## 2 Application

Type	Detecting Object	Use	Remark
ME3-H <sub>2</sub> S	H <sub>2</sub> S	Detecting H <sub>2</sub> S in industry, mine and environmental protection field	

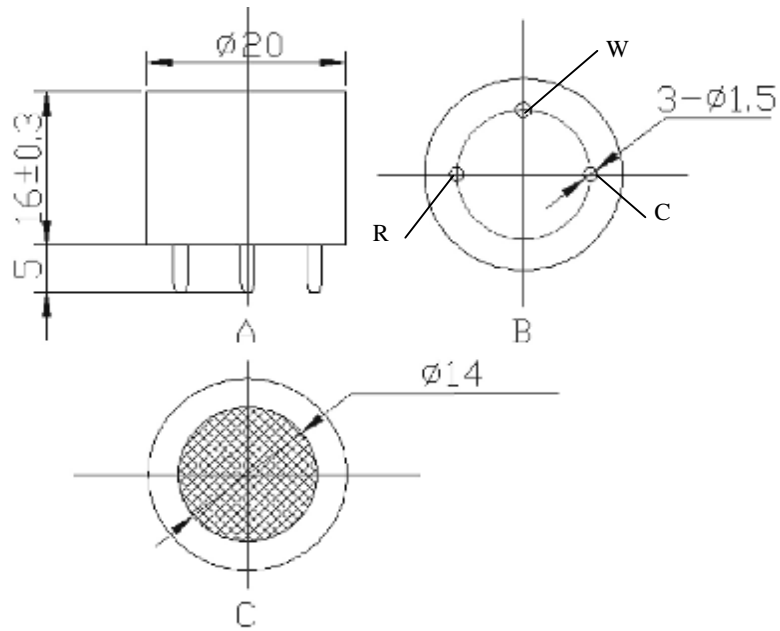
## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Type	ME3-H <sub>2</sub> S	Remark
Measurement Range	0-200	
Sensitivity(μA/ppm)	1.0±0.2	
Reproducibility	Output signal±2%	
Response time(t <sub>90</sub> ) s	≤30	
Signal attenuation	≤2%	/month
Zero drift (ppm)	-0.2~0.3	Clean air
Temperature range (°C)	-20~+50	
Temperature drift (ppm)	≤0.5	20~50°C
Humidity range	≤95%RH	
Pressure range (kPa)	90~110	
Storage temperature (°C)	0~20	recommendation
Storage period (month)	6	
anticipated using life (month)	>24	
Max detecting concentration (ppm)	300	

### 3.1.2 Products external dimension



A—left view    B—planform    C—upward view  
chart 1 products external dimension

### 3.2 Gas sensitivity

#### 3.2.1 H<sub>2</sub>S Electrochemical sensor concentration response characteristic curve

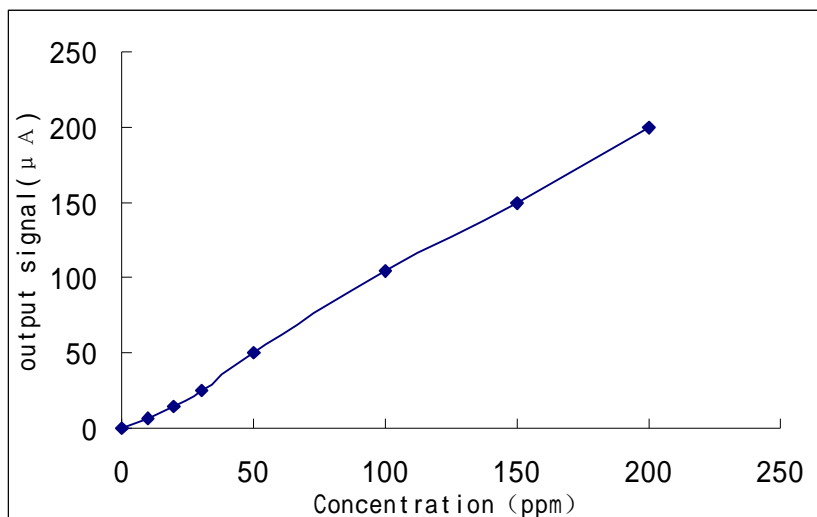


Chart 2 .sensitivity curve

3.2.2 Response and resume time characteristic curve

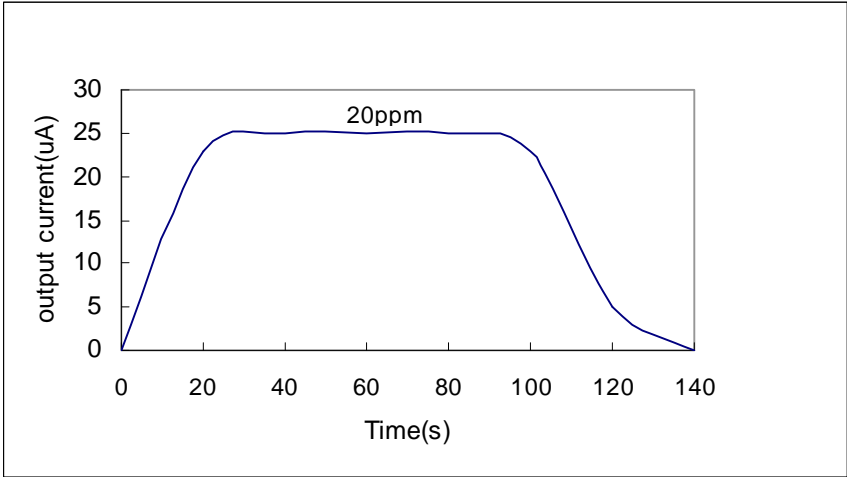


Chart 3.Response and resume curve

3.2.3 Temperature characteristic

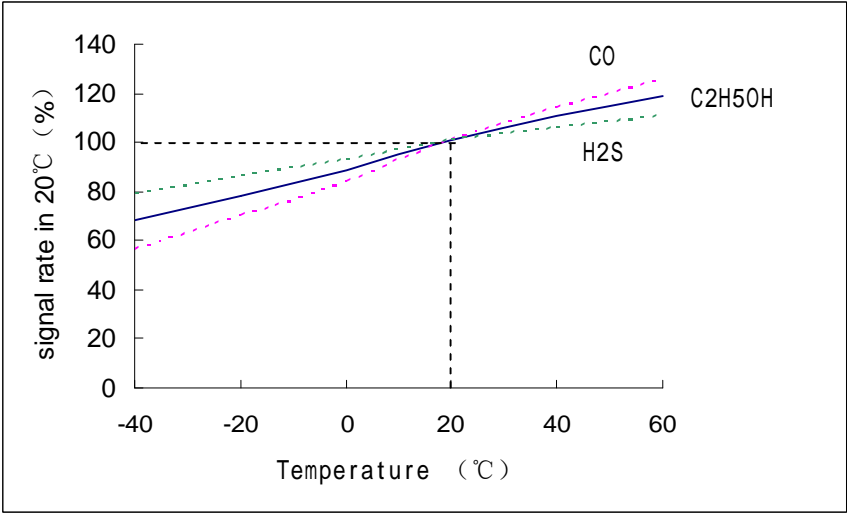


Chart 4.temperature curve



# ME4-H<sub>2</sub>S Gas Sensors Manual

## 1 Feature

ME series H<sub>2</sub>S sensors have low consumption, small size, high sensitivity, wide range of linearity, and better anti-jamming capacity, good reproducibility, stability and reliability ect advantage. It is electrochemical sensor widely suits for mine, industry and environmental protection field ect .



## 2 Application

Type	Detecting Gas	Application	Remark
ME4-H <sub>2</sub> S	H <sub>2</sub> S	Detecting H <sub>2</sub> S in industry, mine and environmental protection field	

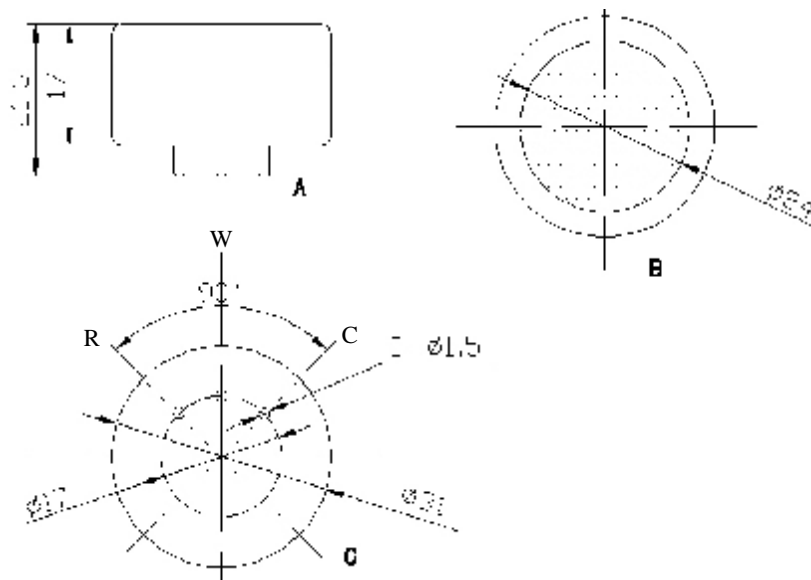
## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Type	ME4-H <sub>2</sub> S	remark
Measurement Range	0-200	
Sensitivity(μA/ppm)	1.2±0.2	
Reproducibility	Output signal±2%	
Response time(t <sub>90</sub> ) s	≤30	
Signal attenuation	≤2%	/month
Zero drift (ppm)	-0.2~0.3	Clean air
Temperature range (°C)	-20~+50	
Temperature drift (ppm)	≤0.5	20~50°C
Humidity range	≤95%RH	
Pressure range (kPa)	90~110	
Storage temperature (°C)	0~20	recommendation
Storage period (month)	6	
Anticipated using life (month)	>24	
Max detecting concentration (ppm)	300	

### 3.1.2 Products external dimension



A—left view    B—planform    C—upward view

Chart 1. products external dimension

### 3.2 Gas sensitivity

#### 3.2.1 H<sub>2</sub>S Electrochemical sensor concentration response characteristic curve

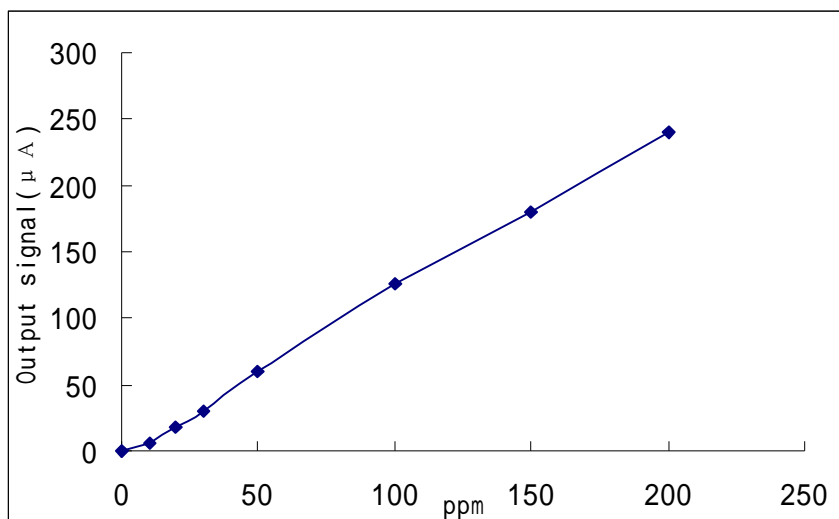


Chart 2 .sensitivity curve

### 3.2.2 Response 、resume time characteristic curve

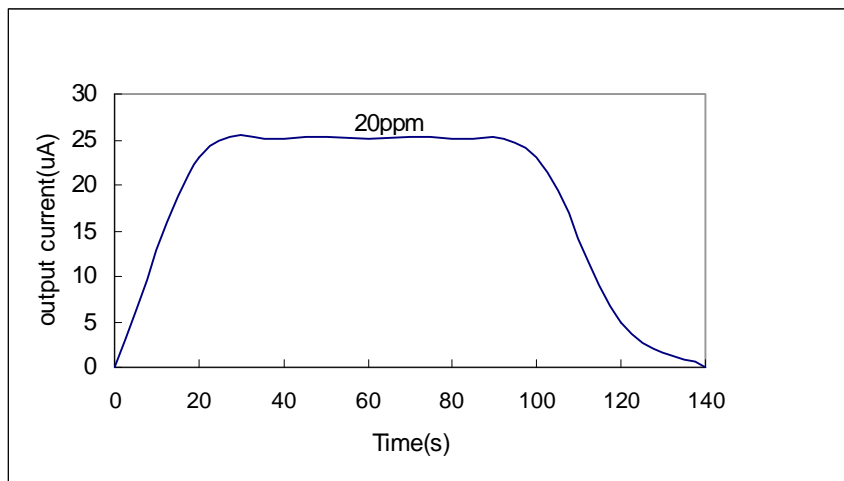


Chart 3. response and resume curve

### 3.2.3 Temperature characteristic

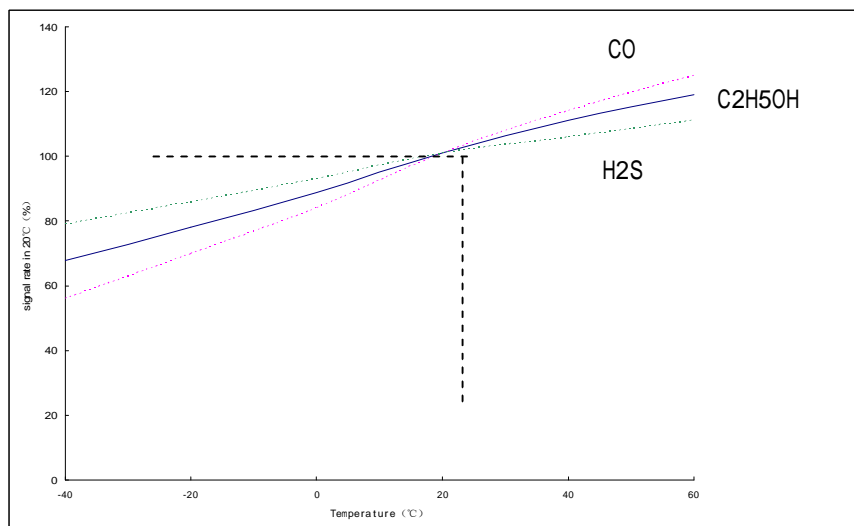


Chart 4. temperature curve

# ME2-O<sub>2</sub> Gas Sensors Manual

## 1 Feature

ME series O<sub>2</sub> sensors have low consumption, mini size, high sensitivity, wide range of linearity, and better anti-jamming capacity, good reproducibility, stability and reliability ect advantage. It is electrochemical sensor widely suits for mine, industry and environmental protection field ect .



## 2 Application

Type	Detecting Object	Use	Remark
ME2-O <sub>2</sub>	O <sub>2</sub>	Detecting O <sub>2</sub> in industry 、 mine and environmental protection field	

## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Type	ME2-O <sub>2</sub>	
Measurement Range	0-25%vol	Remark
Output signal	0.250±05mA(空气中)	RL=100Ω
Reproducibility	Output signal ±2%	
Response time(t <sub>90</sub> ) s	≤30	
Signal attenuation	≤2%	/month
Zero drift (ppm)	≤0.1%vol	Clean air
Temperature range (°C)	-20~+50	
Temperature drift (ppm)	≤0.1%vol	20~50°C
Humidity range	≤95%RH	
Pressure range (kPa)	90~110	
Storage temperature (°C)	0~20	recommendatio
Storage period (month)	6	
anticipated using life (month)	>24	
Max detecting concentration	30%vol	

### 3.1.2 Products external dimension

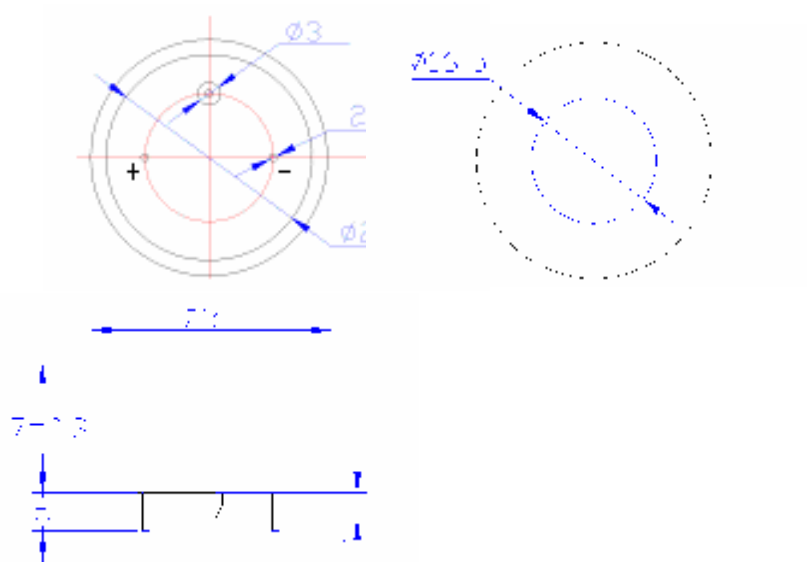


Chart1Products

## 3.2 Gas sensitivity

### 3.2.1 ME2-O<sub>2</sub> type electrochemical sensor concentration response characteristic curve

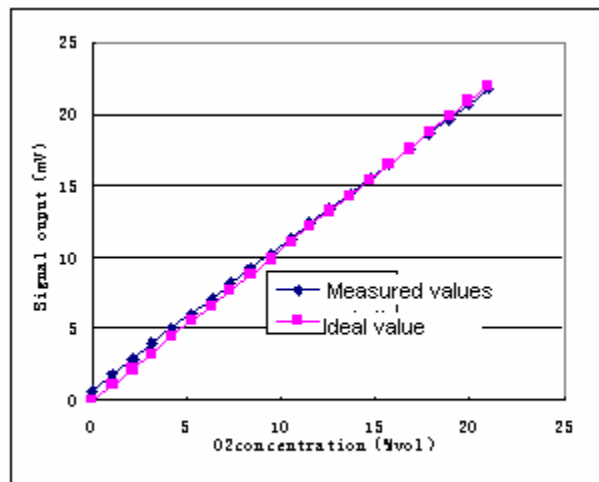


Chart 2 sensitivity curve

### 3.2.2 ME2-O<sub>2</sub> type electrochemistry sensors' response , resume time and output voltage relation curve

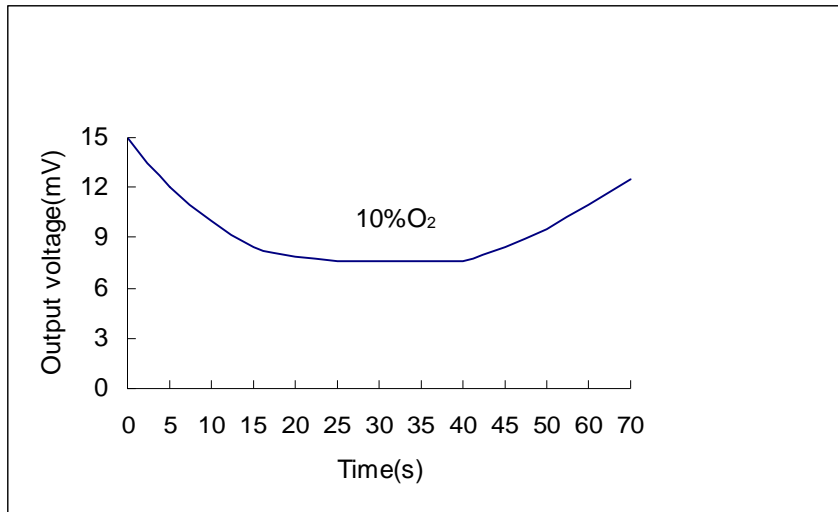


Chart 3.response and resume curve

### 3.2.3 Temperature characteristic

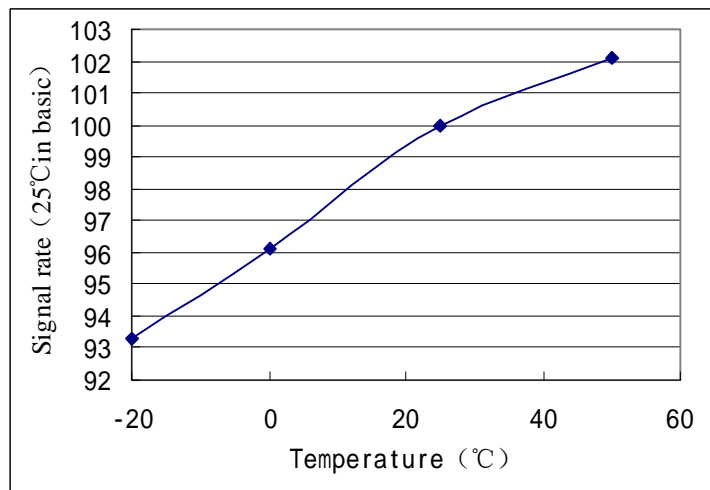


Chart 4. Temperature curve

# ME3-O<sub>2</sub> Gas Sensors Manual

## 1 Feature

ME series O<sub>2</sub> sensors have low consumption , small size, high sensitivity , wide range of linearity , and better anti-jamming capacity, good reproducibility, stability and reliability ect advantage . It is electrochemical sensor widely suits for mine, industry and environmental protection field ect .



## 2 Application

Type	Detecting gas	Application	Remark
ME3-O <sub>2</sub>	O <sub>2</sub>	Detecting O <sub>2</sub> in mine , industry and environmental protection field	

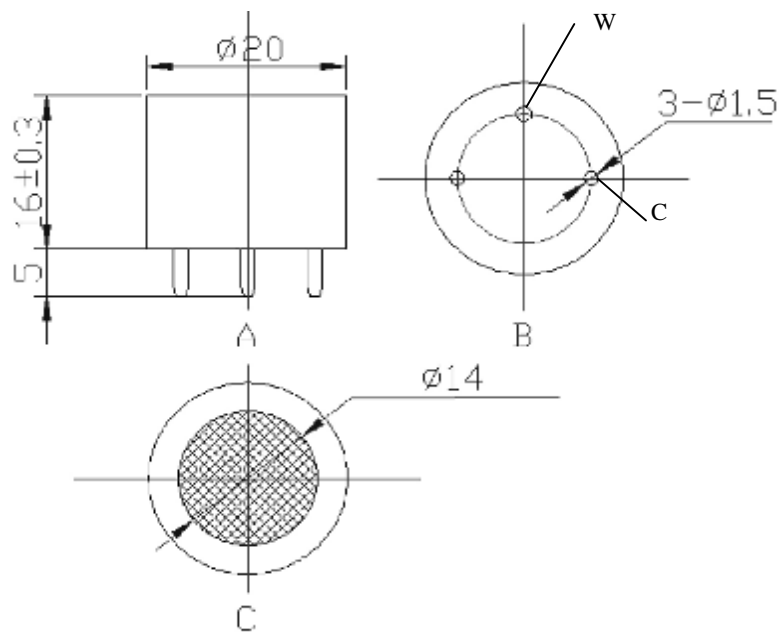
## 3 Feature

### 3.1 Parameter

#### 3.1.1 Basic feature

Type	ME3-O <sub>2</sub>	
Measurement Range	0-25% vol	Remark
Output signal	0.150±05mA(in air)	RL=100 Ω
Reproducibility	Output signal ±2%	
Response time(t <sub>90</sub> ) s	≤30	
Signal attenuation	≤2%	/month
Zero drift (ppm)	≤0.1% vol	Clean air
Temperature range (℃)	-20~+50	
Temperature drift (ppm)	≤0.1% vol	20~50℃
Humidity range	≤95% RH	
Pressure range (kPa)	90~110	
Storage temperature (℃)	0~20	Recommendation
Storage period (month)	6	
anticipated using life (month)	>24	
Max detecting concentration	30% vol	

### 3.1.2 Products external dimension



A—left view B—planform C—upward view

Chart 1. products external dimension

### 3.2 Gas sensitivity

#### 3.2.1 ME3-O<sub>2</sub> type electrochemical sensor concentration response characteristic curve

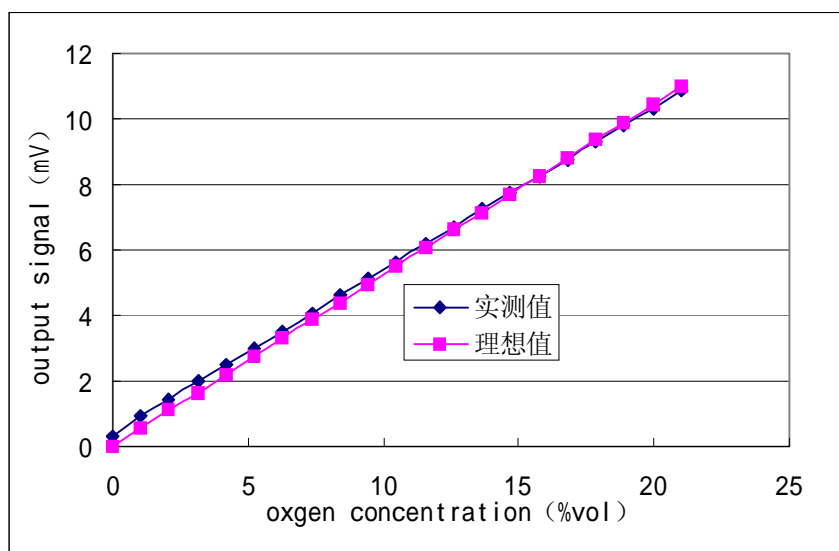


Chart 2 sensitivity curve



### 3.2.2 ME3-O<sub>2</sub> type electrochemistry sensors' response , resume time and output voltage relation curve

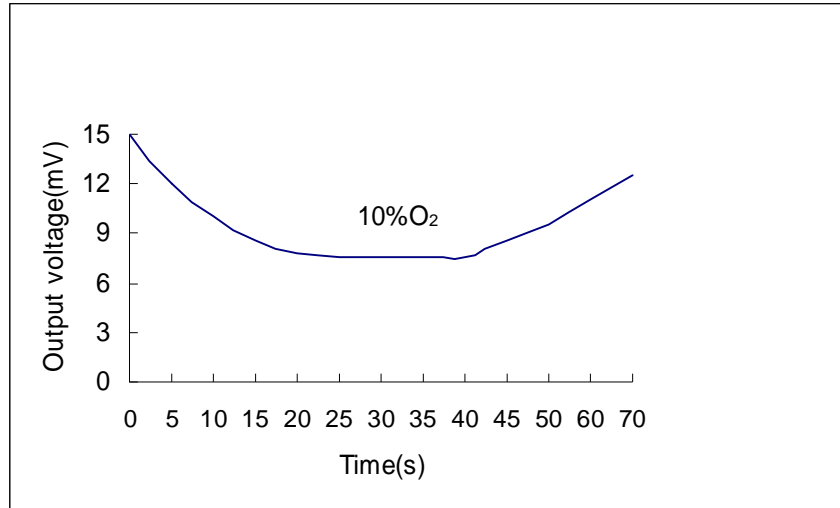


Chart 3.response and resume curve

### 3.2.3 Temperature characteristic

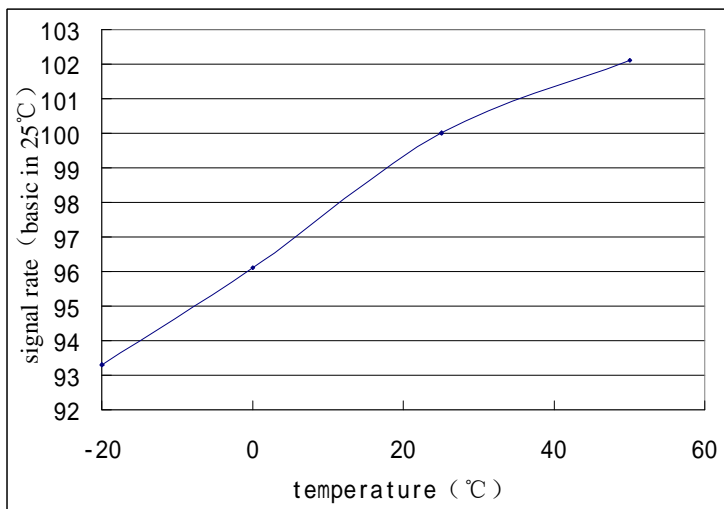


Chart 4.temperature curve